

REMARKS

I. Status of the Application

Claims 9-29 are pending in this application. In the October 16, 2007 Office action, the Examiner rejected claims 10-14 under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent no. 6,381,649 B1 to Carlson et al. (hereinafter "Carlson"). The Examiner has also rejected claims 15-29 under 35 U.S.C. § 103(a) as allegedly being obvious over European Patent Application No. 1058424 A2 to Yazaki et al. (hereinafter "Yazaki") in view of Carlson. The Examiner has also rejected claims 22-29 under 37 CFR § 1.75 because of informalities.

In this response, Applicant has cancelled claims 10-14, 16-19, 23-25 and 29, and amended claims 15 and 22. As set forth below, Applicant respectfully traverses the Examiner's rejection of claims 15, 20-22 and 26-28.

II. The Objection Under 37 CFR 1.75 Should Be Withdrawn

In the October 16, 2007 office action, the examiner objected to claims 22-29 under 37 CFR § 1.75 because of informalities. In particular, claim 22 has been amended to change the phrase "the value stored" to --a value stored--, as suggested by the Examiner. Accordingly, it is respectfully submitted that the examiner's objection to claims 22-29 should be withdrawn.

III. The Rejection Under 35 U.S.C. 102 (e) Should Be Withdrawn

In view of claims 10 to 14 being cancelled, it is respectfully submitted that the rejection under 35 U.S.C. § 102(e) is now moot and should be withdrawn.

IV. The Rejection of Claims 15-29 Under 35 U.S.C. § 103(a) Should Be Withdrawn

In the October 16, 2007 Office action, the examiner rejected claims 15-29 under 35 U.S.C. § 103(a) as allegedly being obvious and unpatentable over Yazaki in view of Carlson. Applicant respectfully traverse the examiner's rejection of claims 15-29 under 35 U.S.C. § 103(a), as the examiner has not made a *prima facie* case of obviousness as described in MPEP § 2142 - 2143.

Pursuant to MPEP 2143, **“the key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious.”** Furthermore, in order to establish a *prima facie* case of obviousness, three basic criteria should be met as set forth in MPEP § 2143.01-2143.03. First, there must be some suggestion or motivation to modify the references or combine reference teachings. MPEP § 2143.01. Second, there must be a reasonable expectation of success. MPEP § 2143.02. Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP § 2143.03.

A. The Examiner Has Not Clearly Articulated The Reasons for Rejecting Claims 15-29 Under 35 U.S.C. § 103(a)

The examiner's rationale for rejecting claims 15 and 22 under 35 U.S.C. § 103(a) is unclear, and therefore, the examiner's rejection of claims 15 and 22 should be withdrawn. In order to make a *prima facie* case of obviousness, the examiner must *clearly articulate* the reasons why the claimed invention would have been obvious. MPEP § 2143.

In the present case, it is respectfully the examiner has not clearly articulated his reasons for rejecting claims 15 and 22 under 35 U.S.C. § 103. First, at page 5 of the

October 16, 2007 Office action, the examiner rejects claims 15 and 22 as being unpatentable over Yazaki in view of Carlson. Then, on page 7, the examiner states that "Yazaki ... teaches all the subject matter of the claimed invention." The examiner does not cite any limitations of claims 15 and 22 that are missing from Yazaki and require a combination with Carlson. Accordingly, it is unclear to applicant whether the examiner's rejection of claims 15 and 22 is a § 102 rejection or a § 103 rejection. Should the examiner maintain the rejection of claims 15 and 22, clarification of the rejection is respectfully requested in order to allow applicant to make a proper response to the rejection.

Second, assuming the examiner intended the rejection of claims 15 and 22 to be a § 103 rejection, the examiner has provided absolutely no rationale why the claimed invention would have been obvious in view of the cited references. In particular, after reciting various features of Yazaki and Carlson on pages 5-9 of the October 16, 2007 office action, the examiner concludes the recitation with the following statement: "Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the features of Yazaki et al. by using features taught by Carlson et al. in order to provide (See Carlson, column 2-3, lines 1-2 and lines 1-5) for motivation)." Applicant respectfully submits that the foregoing motivation for combining Yazaki and Carlson is entirely unclear. Indeed, it appears that the examiner completely omitted the intended statement of motivation in the October 16, 2007 office action, and instead only cryptically cited a few lines of Carlson as providing a motivation to combine. Without a clear indication of the examiner's intended motivation to combine Yazaki and Carlson, it is respectfully submitted that the examiner has failed to *clearly articulate* the reasons why the claimed invention would have been obvious.

As set forth above, the examiner's October 16, 2007 Office action does not clearly communicate the reasons for the rejection of claims 15 and 22 under 35 U.S.C. § 103. Accordingly, the examiner has not *clearly articulated* the reasons why claims 15 and 22 would have been obvious. Thus, the examiner has failed to make a *prima facie* case of obviousness, and it is respectfully submitted that the examiner's rejection of claims 15 and 22 under 35 U.S.C. § 103(a) should be withdrawn.

B. Claims 15 and 22 Are Allowable

In order for the examiner to make a *prima facie* case of obviousness under MPEP § 2143.03, all claim limitations must be taught or suggested by the prior art. In the present case applicant respectfully submits that the examiner has not established a *prima facie* case of obviousness, as all limitations of claims 15 and 22 are not taught or suggested by the prior art.

1. Disclosed Embodiments

Embodiments of the present invention relate to bandwidth policing in which an Internet switch forwards packets to/from a given user based on bandwidth counter value (a "token" in the specification) which is stored in a memory (called a "bucket" in the specification). The memory for storing the parameters associated with each flow is arranged in a structured RAM memory, as opposed to a Register, which was regarded as distinct in this field as of the priority date. Also the tokens and the monitoring takes place on a per flow basis rather than per port basis. The RAM memory stores pointers for each flow which point to the registers storing threshold values against which the token is compared. This means that there is no need to provide registers for each flow. This configuration results in a significant saving in storage requirement for bandwidth monitoring compared with prior art systems such as Yazaki or Carlson.

2. Yazaki

Yazaki discloses only token bucketing principles, rather than how the principles are implemented efficiently in memory. The examiner explicitly states at page 7 of the October 16, 2007 Office action that Yazaki does not disclose “a bandwidth monitoring device having a RAM memory...containing a bandwidth counter from the corresponding set of one or more packet flows.” While the examiner only cited this limitation with respect to claim 1, applicant respectfully submits that similar limitations are found in amended claims 15 and 22. Furthermore, applicant respectfully submits that these related limitations are not the only limitation of claims 15 and 22 not found in Yazaki.

As stated above, the bandwidth monitoring device of claims 15 and related claim 22 include a memory for storing the parameters associated with each flow arranged in a structured RAM memory (as opposed to a Register). Such an arrangement was regarded as distinct in this field as of the priority date. Also the tokens and the monitoring takes place on a per flow basis rather than per port basis. As disclosed in the present application, the RAM memory stores pointers for each flow which point to the registers storing threshold values against which the token is compared. This means that there is no need to provide registers for each flow. This configuration results in a significant saving in storage requirement for bandwidth monitoring compared with prior art systems such as Yazaki or Carlson.

Yazaki determines a flow from specific values of the fields within the packet, and all ports are treated uniformly by the flow detection unit 540. Therefore two packets originating from two different ports may be classified to belong to the same flow by the flow detection unit, if the DSCP field has the same encoding. Accordingly, a “flow” in Yazaki has a different meaning as compared with the “flow” defined in claims 15 and 22

(and as recited at page 4 line 26 to page 5 line 9). Therefore Yazaki does not disclose a bandwidth counter for each flow as required by claims 15 and 22.

In addition, amended claims 15 and 22 require *inter alia* that the predetermined levels are different for different flows and the RAM stores pointers (“control perimeter indication portions”) to the data rather than the actual data itself. At page 8 of the October 16, 2007 Office action, the examiner notes that Yazaki does not disclose these elements. Accordingly, it is clear that Yazaki does not disclose the limitation of claim 15 of “control parameter indicator portions for each of the sets of one or more flows, the control parameter indication portions indicating respective registers for storing the data representative of the one or more predetermined levels”, and the related limitation of claim 22.

3. Carlson

Carlson discloses that the value defining the token bucket should be defined in RAM memory (see column 4, lines 11-14 and column 7, lines 44-46). However, the thresholds with which the token values are compared are also stored inside the corresponding RAM (see column 7, lines 51-54), rather than storing pointers in the RAM memory to data actually stored in registers. Furthermore Carlson does not disclose registers for storing the predetermined levels. Therefore Carlson does not disclose a RAM memory including “control parameter indicator portions for each of the sets of one or more flows, the control parameter indication portions indicating respective registers for storing the data representative of the one or more predetermined levels” as set forth in amended claim 15, with a similar limitation in claim 22.

4. Yazaki in View of Carlson

As set forth above, neither Yazaki nor Carlson teach all the limitations of claim 15 individually or in combination. In similar fashion, neither Yazaki nor Carlson teaches

all the limitations of claim 22 individually or in combination. For example, neither Yazaki nor Carlson teach "control parameter indicator portions for each of the sets of one or more flows, the control parameter indication portions indicating respective registers for storing the data representative of the one or more predetermined levels". Accordingly, the examiner's rejection of claims 15 and 22 under 35 U.S.C. S9) 103(a) should be rejected, as the cited references do not disclose all the claim limitations.

In addition to the above, other reasons also exist for the allowance of claims 15 and 22. For example, in order to establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to a reader of ordinary skill in the art, as of the date of invention, to modify the reference or to combine the reference teachings. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Also there must be a reasonable expectation of success. The teaching or suggestion to make the claimed combination and the reasonable chance of success must both be found in the prior art, not in the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).
M.P.E.P. § 2143

In the present case, there is no suggestion or motivation in the art for combining the references. In the October 16, 2007 office action, the Examiner states at page 10 that the motivation to combine Yazaki and Carlson is stated at Colum 2-3 lines 1-2 and lines 1-5 of Carlson. The alleged motivation does not address the invention of claims 15 and 22. In fact it is hard to see why an artisan of ordinary skill in the art would seek to take arbitrary features from one document and incorporate them into another. It seems very likely that the Examiner's alleged combination would not produce a working system and

thus, there is also no reasonable expectation of success. This is supported by both citations teaching away from the elements now incorporated into claims 15 and 22. Accordingly, claims 15 and 22 are allowable for these reasons as well.

B. Claims 16-21 and 23-29

In the October 16, 2007 Office action, the examiner rejected dependent Claims 16-21 and 23-29 under 35 U.S.C. § 103(a) as allegedly being obvious over Yazaki in view of Carlson.

In view of the cancellation of claims 16-19, 23-25 and 29, and the amendment of claims 15 and 22, this objection is moot.

Claims 20-21 depend from claim 15, claims 26-28 depend from claim 22. Neither Yazaki nor Carlson discloses the required limitations of claims 15 or 22. Also Applicant does not agree that Yazaki or Carlson teaches the limitations added by any of these dependant claims. For at least the reasons of depending on an allowable independent claim, and for adding additional inventive limitations, claims 20-21 and 26-28 are allowable.

V. Conclusion

For all of the foregoing reasons, it is respectfully submitted that applicant have made a patentable contribution to the art. Favorable reconsideration and allowance of this application, including claims 15, 20-22 and 26-28, is therefore respectfully requested.

Applicant has included a petition for a one month extension of time, extending the time to file this response from January 16, 2008 to February 16, 2008. Because the deadline (with one month extension) for filing this response to office action fell on Saturday, February 16, 2008, and because Monday, February 18, 2008, was a federal

holiday, this response is being timely filed on Tuesday, February 19, 2008. In the event applicant has inadvertently overlooked the need for an extension of time or payment of an additional fee, the applicant conditionally petitions, therefore, and authorizes any fee deficiency to be charged to deposit account 13-0014.

Respectfully submitted,



Russell E. Fowler II
Attorney Registration No. 43,615

Please address correspondence to:

Harold C. Moore
Maginot Moore & Beck
Chase Tower
111 Monument Circle, Suite 3250
Indianapolis, Indiana 46204-5115

Telephone: (317) 638-2922
Facsimile: (317) 638-2139
Email: hcmoores@maginot.com